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SUMMARY

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PROBLEMS REGARDING THE MECHANIZATION OF AGRICULTURE

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PROBLEMS REGARDING THE MECHANIZATION OF AGRICULTURE

by

Prof. E. Barat

Summary

1. The problem of the introduction of modern technique in agriculture, - and within it, the problem of mechanization - is a preoccupation of ever larger circles of specialists in developing countries. This is easily understandable in view of the important place occupied by agriculture in the economic structure of these countries, while on the other hand, it is on the realization of an effective technical progress in this branch of national economy that the possibility of bringing under cultivation important areas of arable land, left outside the production process in many of these countries, is largely dependent, as are the possibilities of increasing the agricultural production necessary to the amelioration of food conditions of the population, of improving the quality of agricultural products, which plays such an important role in these countries exports etc.

2. It is obvious that the concrete manner in which the problem is set, and in which if has to be solved, differs appreciably from one country to another. In most developing countries, however, the problem of technical progress in agriculture is rendered extremely complex due to a whole series of factors (the structure of landed property, density of rural population etc.). Its solution should, according to us, take into consideration a number of general requirements, among which we mention:

a) The modification of the present structure of landed property which impedes technical progress, by the realization of land reforms by which those who actually work the land would own it. Such reforms would stimulate the peasantry to obtain larger crops, to bring new land under cultivation and to introduce agricultural machinery.

b) The consistent realization of industrialization, the purpose of the newly created industry being, among others, of supplying agriculture with up-to-date technical means, at favourable prices, and to absorb, at the same time, labour power from the countryside.

c) To find adequate inducements for attracting peasantry towards association forms (co-operation) by which the modern means of production supplied by industry could be rationally used, in common.

3. In this general context of problems and preoccupations, we propose to present in our paper the manner in which the problem of the mechanization of agriculture has been and is being solved in the Rumanian People's Republic.

4. The mechanization of agriculture in the Rumanian People's Republic has appeared as an economic necessity for raising social productivity of labour and the living standard of agricultural population, as well as of the entire population of the country. This purpose is achieved within the general development of national economy, and, in the first place, by the development of industry which ensures the improvement of the technical, material basis of agriculture.

5. Before the second world war, Rumanian agriculture disposed of an insignificant number of tractors and agricultural machinery (in 1938 about 4,000 tractors), while in the last few years the state has endowed agriculture with thousands of tractors, combines and other machinery produced by its own national industry. Only in 1961 the national industry turned out 2o,ooo tractors, 15,ooo tractor drawn ploughs, more than 15,ooo drilling machines with mechanical traction, 6,ooo combines for cereals. As a consequence of the permanent equipement, at the end of 1961, agriculture disposed of 52,ooo physical tractors - about 13 times as many as in 1938 - more than 23,ooo combines for cereals, as well as other machines.

6. The development of the technical material basis of agriculture has been closely interwoven with the formation process of large socialist collective farms, which have provided most favourable conditions for the application of the new technique in Rumanian agriculture. In its first stage, the mechanization process was directed towards the most difficult tillage works and gradually included an even larger range of vegetable growing, fruit growing and animal breeding works.

7. The endowing of agriculture with mechanization means has been accompanied by important economic effects, which materialized, besides facilitating man's labour - in the increase of labour productivity, in lowering production costs, in increased average and total productions etc. In state farms, for instance, in comparison to 1955, in 1961 to a one percent increase in the capacity of mechanization means, per loo ha, corresponds an increase of 2.1% in the labour productivity of a worker in agricultural activity.

8. In state planning for the development of national economy for 196o-1965, important development measures for the technical material basis of agriculture are provided for. In 1965 there will be one physical tractor for loo ha of arable land, thus ensuring complex mechanization possibilities for the majority of agricultural works.

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